

ABSTRACT OF THE DISCLOSURE

A minute droplet forming apparatus comprises a nozzle 1 for storing therewithin a liquid 2 for forming a droplet 3; a substrate 5, disposed so as to face the tip of the nozzle 1, for mounting the droplet 3 dropped from the tip of the nozzle 1; and a pulse power supply 10 for applying a pulse voltage between an electrode 12 arranged in the liquid 2 within the nozzle 1 and the substrate 5. After a liquid column 2a is formed by projecting the liquid from the nozzle tip by applying the pulse voltage between substrate 5 and the electrode 12, a nickel piece 7 disposed within the nozzle 1 is moved to the tip part of the nozzle 1 by an XYZ stage 9 by way of a magnet 8, so as to enhance the fluid resistance in the nozzle tip part, thereby causing a setback force for returning the liquid 2 into the nozzle 1, by which the droplet 3 is isolated from the liquid column 2a.